

Two New Brenthidae in the Bishop Museum Collection

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I have examined a collection of Brenthidae from the Bernice P. Bishop Museum, Honolulu, assembled and sent to me by E. H. Bryan, Jr. Some of these specimens are from various parts of Polynesia and Melanesia and help to clear up the tangled zoogeographical relations in these scattered archipelagoes. No Brenthidae have so far been reported from Hawaii, and my hopes have been disappointed that I would find some among the material from the Bishop Museum. It seems as if no Brenthidae occur there.

The finding of Brenthidae in Hawaii would clear up a very important faunistic question. My lengthy studies lead me to recognize two great centers of development: tropical Africa, and the Papuan region, with New Guinea as the nucleus. The Papuan forms have in part shifted to the northwest; but have not made a very great migration. They have spread more to the west: to Madagascar and the neotropical region, being absent only in Africa itself. The distribution from the African center is more important. These forms have gone east as well as west, and are known to have reached as far as Tahiti. The newly established Samoan species likewise has similar affinities. A second migration has moved from Madagascar to South America, as the common species of that region prove. The Nemocephalini and Brenthini of South America have developed from the Pseudocecephalini of Africa and Madagascar. We must regard these highly developed Brenthidae as derived in this way. And now it is important that in the Marquesas islands one typical Brenthus is established, but nothing derived from the African center. The finding of similar neotropical Brenthidae in Hawaii would fix the limit of the great wave of migration.

Geologically the Marquesas Islands do not belong to Melanesia.

Samoa must lie about on the border of Melanesia, as is demonstrated by the Brenthid discoveries. The submergence between the groups of islands is very profound, and it will have to be supposed that at the time of their colonization, the present islands stood as much greater continental masses, with a deep sea separating the Marquesas Islands from Melanesia.

Perhaps an intensive search in Hawaii might yet disclose some Brenthidae.

***Cyphagogus fijianus* n. sp.**

Black, bloodred on the 1st, 2nd, and a part of the 3rd ridges; the red part is broadest at the base, posteriorly it narrows, and ends at the suture. The cone of the prothorax is redbrown at the neck; legs redbrown to dark brown; the entire body shining, the ventral surface more so than the dorsal surface. Head parallel, flat, posterior margin straight. Meta- and mesorostrum only a little smaller than the head; prorostrum slightly broadened, anterior margin faintly sinuated on the inside; punctations generally slight, delicate, scattered; the underside of the head with long, narrow gular furrows; mesorostrum with two long furrows; prorostrum with two distinct hairs. Antennal segments conical, the 3rd and 4th somewhat quadrate, 5th to 8th broader than long, 9th to 11th considerably enlarged, 9th and 10th resembling the 8th in shape; all the segments from the 8th on, very loosely connected; 1st to 8th segments separated (distinct) with long hair; from the 9th on, pitted and with short pubescence. Cone of the prothorax broad and flat, the prothorax of the usual form, with the exception of the separated anterior part, the loculose punctation, and the long haired punctures. The 2nd ridge of the elytra narrowed posteriorly, the 3rd to 6th sharp edged, as broad as the furrow, the following surface broader than the furrow; from the 3rd on, all the ridges separate, strongly punctate and with long hair. Fore and middle legs normal; the petiole of the hind femora grooved on the inner side, the transition scarcely narrowed from the club to the middle of the stoutness, hairy on the petiole, base of the club stout, long, distinct, the middle of the club without sculptures, the apex (knee) with punctate sculptures and with short hair. Tibia extremely robust, concave on the inner side, shagreened and soft, with long hair. Metatarsus very robust, as long as the second and third tarsal segments combined. Claw segment cylindrical. Metasternum and abdomen with scattered punctures.

Length: 6-8 mm.; breadth of prothorax, about 1 mm.

Fiji: Viti Levu, Colo-i-Suva, June 28-30, 1924 (E. H. Bryan, Jr.).

Type in the Bernice P. Bishop Museum.

This new species is the fortieth of the genus. It is easily distinguished from all the other species by the nature and manner of its coloration: there are no other *Cyphagogus* which show

longitudinal markings, all have cross bands. The bands are united higher on the sides.

C. fijianus is the first species occurring outside the Australian continent. The sphere of dissemination for the genus has been from Ceylon to the islands east of the continent of Australia. Inasmuch as the relations are scanty, the general type of the



Fig. 1. *Cyphagogus fijianus*, color pattern on elytron.

Fig. 2. *Baryrrhynchus setosellus*, color pattern on elytron.

(The dark shaded parts are light.)

species of the Australian continent is the colored as well as any other. Probably the support is greater in New Guinea. The dark colored type prevails there, bright or mottled species being secondary. As soon as discoveries are made in the Solomon Islands, the faunistic relations will become clearer.

***Baryrrhynchus setosellus* n. sp.**

Male: Violet brown, prothorax sometimes redbrown, the entire body very shining. Head transverse, without furrows, single coarse punctures, the latter with hairs; hind margin nearly straight; eyes projecting; ventral surface, in front of the gular pits (or furrows) with lateral triangular depressions (cavities). Metarostrum semicircular, excavated, the hollows with wrinkled sculpture; the sides with single punctures and hairy. Antennal processes developed, in the middle with scattered, coarse punctures. Pro-rostrum with coarse, wrinkled sculpture. Mandibles separate, obtusely toothed. The ventral side of the pro-rostrum keeled. 3rd antennal segment conical, 4th and 5th more or less cylindrical, the following cylindrical acute angled, the 9th longer than the 8th or 10th. Prothorax elliptical, without furrows, with fine puncturation and short, close lying hair on the outside. The elytra furrowed like a lattice, with erect hair. Pattern as in figure 2. Legs normal. Metasternum and abdomen strongly furrowed.

Female: differing in the usual manner.

Length: 16-18 mm. Breadth of prothorax, 3 mm.

Solomon Islands: Guadalcanar (J. A. Kusche). 1 male and 3 females.

Type in the Bernice P. Bishop Museum.

Setosellus is related to *indocilis* Fairm., differing from it as follows: The ground color is not red but violet brown; the cavi-

ties of the mesorostrum are wrinkled and not punctured; the mandibles are short and robust, resembling more the Malayan than the Papuan species; the elytra have unusually strong hair. The species shows a strong relationship to the Malayan forms and suggests that the genus has wandered eastward from a western center.